

REMARKS

Claims 1-8 are pending in the application.

Drawings

The drawings received on 11/6/03 have been disapproved since, in examiner's opinion, the specific design of the at least two jointing members and the arrangement thereof (new Fig. 7) is not supported by the disclosure as originally filed and deemed to be new matter. The examiner also rejected corrected drawing Fig. 6 but indicated that it would be approved if tried separately. Furthermore, the examiner continues to object to the drawings under 37 CFR 1.83 (a). The examiner repeats that the drawings must show every feature of the invention as specified in the claims. The examiner points out that the arrangement with at least two jointing stones as claimed in claims 6 to 7 must be shown or the features canceled from the claims.

It is not understood why examiner would reject the drawing correction of Fig. 6 as it apparently is acceptable in the form presented with the last amendment. There is no requirement on the books that, if several figures are submitted in order to correct drawing problems, **all of them** must be approved or **all of them** must be disapproved.

However, since Examiner has disapproved Fig. 6, applicant is left with no choice but resubmitting Fig. 6.

In regard to Fig. 7, applicant again submits the same drawing figure asked it is not seen how any new matter could be introduced by simply illustrating what is stated in the specification. Page 12 of the specification clearly sets forth that the jointing stone can be comprised of two or more jointing stone members that are positioned at a minimal axial spacing relative to one another. The minimal axial spacing is further defined as the spacing that is provided in the stroke direction between the jointing stone members. It is further set forth that the individual jointing stone members are secured by the holders 17, 18. The holders 17, 18 are clearly illustrated in Figs. 1, 2, 3, 4, 5; the axial direction is indicated by arrow 29 in drawings Figs. 2, 3, 4. Moreover, it is specified that the two jointing stone members are arranged on the jointing device such that in the center position relative to the cutting edge 9 their ends facing away from one another project axially past the cutting edge 9. The center position of the jointing device is illustrated in Fig. 1.

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Therefore, if the jointing stone members are spaced apart in the axial direction, act on the blade edge 9 as illustrated, are secured by the holders 17, 18, have opposed ends projecting axially past the cutting edge 9, there is no other arrangement possible or conceivable than that illustrated in Fig. 7. Fig. 7 therefore is resubmitted. No new matter is introduced by the illustration.

Claim Rejections - 35 U.S.C. 112

Claims 6-7 stand rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite.

Claim 6 states that the jointing stone 25 is comprised of two or more jointing stone members spaced apart from one another. Fig. 7 illustrates this feature without introducing new matter; see page 12 of the instant specification. In this configuration, the two jointing stone members have a jointing area that is effective during the jointing process of the cutting edge 9. The jointing stone members project laterally past the cutting edge 9, as described in the instant specification. The spacing between the jointing stone members is said to be minimal. Therefore, when adding the length of each of the two jointing stone members, a combined jointing area results that is longer than the length of the cutting edge. Claim 6 only specifies that the stroke length of the jointing action is longer than the spacing between the stone members. The axial spacing between the stone members is minimal as described in the specification. It is not seen how the definition of claim 6, i.e., the stroke carried out by the jointing stone members is longer than the spacing between stone members, could contradict claim 1.

The same holds true also for the feature of claim 7. Even when the jointing stone members according to claim 7 each are shorter than the cutting edge 9, the effective jointing area of both jointing stone members taken together is longer than the cutting edge 9.

The device, whether provided with a single stone 25 or two stone members 25a, as shown in Fig. 7, joints the edge by being first advanced radially (arrow 27) and then moved axially as shown by arrow 29, i.e., the jointing stone or the stone members are moved lengthwise across the edge 9. Because the jointing stone or the jointing stone members project laterally past the edge as shown in all Figures, jointing can be performed by means of an axial stroke having a length that is shorter than the length of the cutting edge; the

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axial movement eliminates nicks and notches.

Reconsideration and withdrawal of the rejection of claims 6 and 7 under 35 USC 112 is therefore respectfully requested.

Rejection under 35 U.S.C. 103

Claims 1, 2, 4-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over *Theien* in view of *Englert*.

Claim 3 stands rejected under 35 U.S.C. 103(a) as being unpatentable over *Theien* in view of *Englert* and *Mann*.

The prior art reference *Theien* in Figs. 5 and 6 illustrates a straight jointing stone 140 for jointing straight cutting edges of cutting elements C (Fig. 6). The jointing stone 140 is longer than the cutting edge. During the jointing process, the jointing device is fed **radially** relative to the axis of the spindle VR. The jointing stone 140, once it has been advanced to the cutter edge does not carry out an **axial movement** relative to the edge. The jointing stone 140 with the holder 41, 100 can be moved only radially by means of the knob 46; this is described in col. 12, lines 33ff. No other movement is possible or even contemplated. The only disclosure to be derived from this reference is that the jointing stone is to be advanced radially for the jointing process.

There is no incentive to combine this exclusively radially acting jointing device with a jointing device where axial movements are carried out, in particular, because the method and device are to be used at the same time for straight and profiled edges thus allowing only for radial advancement since axial movement would be impossible in connection with profiled cutting edges.

Englert discloses that the jointing stones 13 are moved across the length of the cutting edge but the jointing stroke that is being carried must be very large in order to cover the entire length of the cutting edge. Fig. 1 shows three jointing stones 13 spaced apart from one another on a support 12. The support 12 can be moved back and forth by a drive 23 with guide 11 on the transverse stay 10. The drive comprises a piston-cylinder unit having a cylinder 24 fastened to the base member 1 and a piston rod 25 connected to the projection 26 of the support 12. Fig. 1 shows the piston rod 25 in the retracted position and

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the support 12 with jointing stones 13 in the rightmost end position. When the piston rod 25 is extended, the support 12 moves to the left.

As illustrated, the length of the jointing stones 13 is significantly shorter than the length of the cutting edge to be jointed. Accordingly, this prior art reference cannot teach to perform a short jointing stroke for jointing an edge.

The two cited prior art references therefore describe two methods that differ greatly from one another in regard to their basic approach: *Theien* teaches only radial advancement of the jointing stone; *Englert* teaches a stroke that is several times as long as the axial width of the jointing stone.

Even when combining the two methods, the subject matter of claim 1 would not be obvious because the primary reference to *Theien* is based on the principle not to move the jointing stone at all in the direction of the length of the cutting edge. This method does not employ any stroke at all. On the other hand, the method described in *Englert* teaches to carry out a very large stroke because the jointing stones 13 that are used for jointing are several times shorter than the edge to be jointed.

If a person skilled in the art were to combine the two methods, the result would be a method where a jointing stone that is as long or longer than the length of the cutting edge to be jointed would carry out a long jointing stroke. This is however not the subject matter of the present invention.

Moreover, it must be taken into consideration that the cited prior art reference *Theien* discloses in col. 3, lines 25-38, a known basic jointing method that the *Theien* method wants to improve. The known methods "Item A" and "Item D(1)" refer to a process of jointing where a "relatively narrow stone" clamped in jaws is fed lengthwise to the cutter edges to be jointed (parallel to the spindle axis) for bringing all edges of the rotating cutter head to the same radius. This is the same method as described in *Englert*. A person skilled in the art, when reading the primary reference *Theien* therefore is being taught that **he should not employ the method using narrow stones and feeding the stones lengthwise**. Accordingly, *Theien* teaches away from using the method of *Englert*. It is therefore not obvious to combine the method described in *Theien* with the method of

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Englert.

The examiner refers to Figs. 4 and 6 of the primary reference to *Theien* as showing a jointing stone 40, 140 whose jointing surface 40a, 140a has a jointing area that is longer than the cutting edge. The jointing stone 40 has a profile. For this reason, the jointing stone 40 does not carry out a jointing stroke and is only radially advanced relative to the cutter head. This embodiment also underscores that the method according to *Theien* employs during jointing only a radial advancement and does not consider axial movement, even though the axial movement is known to *Theien* as evidenced by the description of the prior art in col. 3. Even though the axial movement is known to *Theien*, *Theien* does not consider using such an axial movement of the jointing stones in connection with his jointing method.

The feature of claim 2 is also not disclosed in the primary reference to *Theien*. Claim 2 defines that the jointing stone 25 according to the invention is longer by the jointing stroke than the edge 9 to be jointed. *Theien* does not employ a jointing stroke for the jointing stones 40, 140. *Englert* shows three very narrow jointing stones 13. Fig. 1 of *Englert* shows the end position of the support 12; the support 12 with the jointing stones 13 when moved into the other end position (left stone 13 aligned with left leg 5) would carry out a stroke that is more than one third of the length of the support. The length of a narrow stone 13 and the length of the jointing stroke will not add up to a length greater than the cutting edge which will be approximately as long as the transverse stay 10. Therefore, claim 2 is not obvious in view of the prior art references.

The examiner's argument that, given the length relationship between the jointing stone and the cutting edge in *Theien*, it would be obvious to configure the jointing stone according to the feature of claim 2 is not convincing because the jointing stone could also be somewhat shorter than the cutting edge. Still, the jointing stone would have to carry out only a short stroke in order to joint the cutting edge 9 across its entire length.

The feature of claim 8 is also not obvious in view of the primary reference to *Theien* because the primary reference does not disclose any stroke being carried out by the jointing stone 40, 140 and the secondary reference to *Englert* teaches a long stroke.

The examiner has also cited *Main* (U.S. 5,727,991) as being relevant to the instant

invention. This patent was filed 1995, that is 6 years later than the German patent to *Englert* and 12 years later than *Theien*. Despite the fact that the prior art references *Theien* and *Englert* are known at the time of filing, U.S. 5,727,991 does not employ the method that is said to be obvious according to the examiner (combination of *Theien* and *Englert*). U.S. 5,727,991 discloses also a method where the jointing stone is significantly shorter than the edge to be jointed so that the jointing stone during the jointing process must also perform a large stroke. This patent U.S. 5,727,991 therefore contradicts the argument used by the examiner that it would have been obvious for a person skilled in the art to combine *Theien* and *Englert* at the time the instant invention was made.

Claim 1 and its dependent claims 2 to 4 and 6 to 8 are therefore believed to be allowable.

Claim 5 has been rewritten in independent form. Claim 5 defines that the stroke length is such that a rearward end of the jointing stone, when viewed in the stroke direction, projects past the cutting edge at the end of the relative stroke.

This is not obvious in view of the cited prior art references. *Theien* does not disclose a stroke being carried out. *Englert* shows a long stroke length but is silent as regard the position of the jointing stones 13 relative to the cutter edge in the end position of the jointing stroke. It would be equally possible that the jointing stone in the end position is flush with the cutting edge. It would also be possible that the jointing stone's rearward end is positioned on the cutting edge. Without any teaching in regard to the end positions of a jointing stroke being provided by the prior art references, the subject matter of claim 5 cannot be obvious.

CONCLUSION

In view of the foregoing, it is submitted that this application is now in condition for allowance and such allowance is respectfully solicited.

Should the Examiner have any further objections or suggestions, the undersigned would appreciate a phone call or e-mail from the examiner to discuss appropriate amendments to place the application into condition for allowance.

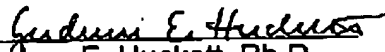
Authorization is herewith given to charge any fees or any shortages in any fees required during prosecution of this application and not paid by other means to Patent and

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Encl.:

- time extension petition (1 sheet);
- replacement drawing sheet/s Figs. 6 and 7 (2 sheet/s);
- Notice of Appeal (1 sheet)

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